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NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

**MOTIVATING LANGUAGE AND EMPATHIC
LEADERSHIP DRIVES AIRCRAFT READINESS**

by

Nickolas H. Aionaaka

March 2017

Thesis Advisor:
Second Reader:

Edward H. Powley
Bryan J. Hudgens

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**MOTIVATING LANGUAGE AND EMPATHIC LEADERSHIP DRIVES
AIRCRAFT READINESS**

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Major, United States Marine Corps
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Submitted in partial fulfillment of the
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MASTER OF BUSINESS ADMINISTRATION

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ABSTRACT

The Marine Corps is concerned with aircraft readiness, retention levels and aircraft mishaps. High-quality connection, unit support and organizational justice are traits structured within Marine aviation logistics. Miscommunication, however, continues to delay responsiveness. This thesis explores qualitative measurements and develops a proposed theoretical framework to study factors that might better predict readiness. The thesis also presents possible quantitative metrics of readiness within Marine aviation logistics as well as measures of effective communication and relationships. Motivating language theory provides the general framework to explore the omission of service levels. Data elements within the Aviation Maintenance and Supply Readiness Report and Individual Training Standards System aim to provide measurements of readiness. This thesis further proposes a Marine Air Group survey that explores the long-term benefits of motivating language and empathic leadership on readiness. Ultimately, this thesis proposes that the positive influence of motivating language and the mediation of empathic leadership increase unit and individual readiness.

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LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|----------|--|
| ACE | Air Combat Element |
| AMCR | Aircraft Material Condition Report |
| AMO | Aviation Maintenance Officer |
| AMSRR | Aviation Maintenance and Supply Readiness Report |
| ASO | Aviation Supply Officer |
| ASVAB | Armed Services Vocational Aptitude Battery |
| CNAF | Commander, Naval Air Forces |
| DCMA | Defense Contract Management Agency |
| Depot | Depot Level Maintenance |
| DOD | Department of Defense |
| DON | Department of the Navy |
| FAR | Federal Aviation Regulations |
| FIAR | Financial Improvement Audit Readiness |
| FMR | Financial Management Regulations |
| GCE | Ground Combat Element |
| HADR | Humanitarian Assistance Disaster Relief |
| HQC | High-Quality Connections |
| ICT | Information and Communications Technology |
| I-Level | Intermediate Maintenance Level |
| ITSS | Individual Training Standards System |
| ITWF | International Transport Workers' Federation |
| JAO | International and Operational Law Branch |
| LCE | Logistics Combat Element |
| LMX | Leadership-Management Exchange Theory |
| MAGTF | Marine Air-Ground Task Force |
| MALS | Marine Aviation Logistics Squadron |
| MALS-ASD | MALS Aviation Supply Department |
| MALS-IMA | MALS (I-Level) Intermediate Maintenance Activity |
| MAW | Marine Aircraft Wing |
| MCWP | Marine Corps Warfighting Publication |

| | |
|----------|--|
| MEU | Marine Expeditionary Unit |
| ML | Motivating Language Theory |
| NALCOMIS | Naval Aviation Logistics Command Management Information System |
| NC | Not-Carried |
| NCO | Non-commissioned Officer |
| NCOIC | Non-commissioned Officer in Charge |
| NIS | Not-in-Stock |
| NMCS | Non-Mission Capable Supply Aircraft/Documents |
| O-Level | Organizational Maintenance Level |
| OIC | Officer in Charge |
| OOR | Out of Reporting Aircraft |
| PBL | Performance-Based Logistics |
| RBA | Ready Based Aircraft |
| SLA | Service Level Agreements |
| SQDN | Squadron (O-Level) Maintenance Activity |
| SNCO | Staff Non-commissioned Officer |
| SNCOIC | Staff Non-commissioned Officer in Charge |
| USMC | United States Marine Corps |

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I. INTRODUCTION

It is the individual Marine—not machines or technology—that defines our success in war. Our focus rests, as it always has, upon the enhancement of the individual Marine, and his ability to win in combat. These Marines will be forged in the same furnace of shared hardship and tough training that has produced the world’s finest warriors for generations.

—31st Commandant, General Charles Krulak, 1998 (Sturkey, 2010, p. 44)

Marine Aviation is a strategic element that provides depth, capacity and reach within the battlefield. The Marine Air-Ground Task Force (MAGTF) “creates options and decision space for our Nation’s leaders” (International and Operational Law Branch [JAO], 2013, p. 1-1; United States Marine Corps [USMC], 2013; USMC, 2017). To meet future demands of aviation, the Marine Corps emphasizes mission readiness and personnel retention (USMC, 2016; Fox News, 2016; USMC, 2017).

Motivating language (ML) and empathic leadership are traits deeply rooted in the Marine Corps. From the first day of boot camp, Marines are taught the value of mission accomplishment, troop welfare, teamwork and leadership (Estes, 1956; USMC, 1980; Krulak, 1984; Da Cruz, 1987; Sturkey, 2010) through ML and demonstrated acts of empathic leadership. Boot camp Drill Instructors immediately earn the trust and respect of their Recruits by exemplifying ML through direction-giving language, empathic language and meaning-making language (Covey, 1989; Covey, 2006; Mayfield & Mayfield, 2016a; Mayfield & Mayfield, 2016b). It is through ML and empathic leadership that battles are won, obstacles overcome, and adversities endured (Griffith, 1963; Krulak, 1984; USMC, 2002; Gray & Otte, 2006). These are characteristics that make the Marine Corps “America’s Expeditionary Force in Readiness” (JAO, 2013, p. 1-1; USMC, 1997; USMC, 2013; USMC, 2017).

A. PROBLEM STATEMENT

1. Background for Marine Aviation Logistics

Aviation policies and slow logistics support systems are other reasons for separation within aviation logistics. Aviation logistics policies are built on strict Federal Aviation Regulations (Aviation Safety Bureau, 2016), Department of Defense Financial Management Regulations (DOD FMR) (DOD, 2016b, n.d.), Financial Improvement and Audit Readiness (FIAR) Guidance (DOD, 2016c), and Department of Defense Standards of Conduct (DOD, 2016a). FAR prevent aircraft mishaps while DOD FMR, FIAR and Standards of Conduct guidelines prevent misuse and abuse of government funds. Therefore, leniency, innovation and “deviations” from policy are highly scrutinized within the aviation industry (DON, 2012a, pp. 1–3).

Marine aviation is a cultural environment that is different from boot camp and Marine ground forces. Aviation logistics Marines are selected from the “best and brightest” (Long, 2014, p. 1). They possess high armed services vocational aptitude battery test scores in general science, arithmetic reasoning, mathematical knowledge, and electronics information (“ASVAB and Marine Corps Jobs,” n.d.). However, strict aviation policies, tedious administrative process and time constraints of the flight schedule can prevent initiative, delegation of authority and time for social interaction normally seen among Ground Forces (Coram, 2002; Moist, 2016). Today, the Marine Corps is experiencing an increasing trend of dissatisfaction within aviation logistics.

Marine aviation is plagued with problems and it needs serious attention now! It is no secret that the Marine Corps Aviation has always taken a back seat to the ground side... But this disparity...manifests itself in the minds of individual Marines...morale is at an all-time low...[and] Marines are disappointed, disenchanted or disheartened. Aviation MOS re-enlistments are down 20 percent. Aviation maintenance departments are being asked to do a lot more with far less than in the past. (Moist, 2016)

Marine Corps Commandant General Neller added:

The Marines that we want to re-enlist don't want to stay because they get tired of being around stupid people. They do. They get frustrated, they get tired of beating their head against the wall. [They say] ‘You guys won't

listen to me, I'm outta here. I'm going to go to college and make a million bucks.' And they do. (Bacon, 2016)

2. Aviation Burnout and Overload

Aircraft readiness, low retention levels and aircraft mishaps are characteristics of “burnout.” Burnout is characterized by physical and emotional exhaustion, which increases anxiety and impaired performance (“Burnout,” 2008). In 2009, International Transport Workers’ Federation (ITWF) reported high levels of mental fatigue and burnout among civilian aviation employees (Civil Aviation Authority, 2009). Studies by burnout researchers also report burnout and fatigue as contributing factors for airline accidents and incidents (Fanjoy, Harriman, & DeMik, 2010; Maslach & Leiter, 2008; Rundmo, 2002; Day, Sibley, Scott, Tallon & Ackroyd-Stolarz, 2009). Some of the contributing factors to burnout are information overload, lack of resources, lack of professional development and “pilot pushing” (Asher, Donelson & Higgins, 1975; USMC, 2000b, p. P-2; Day, Therrien, & Carroll, 2005; Neider, Vejvoda, & Mass, 2008; Day et al., 2009; FAA, 2010, p. 19; USMC, 2016; Fox News, 2016; USMC, 2017). Pilot pushing is the pressure of keeping airplanes in the air as much as possible regardless of critical equipment problems, severe weather conditions or fatigue (Day, Therrien, & Carroll, 2005; Neider, Vejvoda, & Mass, 2008; Day et al., 2009; Slyman, Jacobec, Cox, & Rubel, 2009; FAA, 2010, p. 19; Hixenbaugh & Paladino, 2016).

3. Fill Rates for Whole Activities, Service Level for Retail Activities

The Department of Defense (DOD), Defense Contract Management Agency (DCMA) and the DON uses fill rates and Performance-Based Logistics (PBL) strategies for wholesale activity support (DCMA, 2002; DOD, 2001; DON, 2012c). But, fill rates and PBL strategies do not support readiness strategies at the retail level (United States Government Accountability Office [GAO], 2016). “Right parts, right time, and right place” are characteristics that describe readiness identified by Naval Aviation Enterprise (DON, 2010, 2013; 2015b; n.d.b). *Fill-rate* is defined as the ability to provide the right part, to the right location, at a “desired time” (DCMA, 2002, p. 13) but not specifically at the right time. “Having a high fill rate is of no value to the end customer if they are

unable to use their equipment when needed” (Altay & Litteral, 2011, p. 292). The term right time refers to support strategies related to service level and customer service (Tersine, 1994, p. 232; Chapman, 2000; Altay & Litteral, 2011, p. 292). Service level agreements (SLAs) are contracts between the supporting establishments and customers that define acceptable and unacceptable service levels (Altay & Litteral, 2011, p. 257). “A better approach is to have a mix of service level metrics that are more relevant to what the customer wants” (Altay & Litteral, 2011, p. 292).

B. PURPOSE

This thesis proposes a Marine Air Group survey and study that assesses the long-term benefits of motivating language and empathic leadership on unit and individual readiness. Ultimately, this study, as shown in Figure 1, explores the positive influence of HQC, unit support and organizational justice on motivating language and the mediation of empathic leadership increases unit and individual readiness.

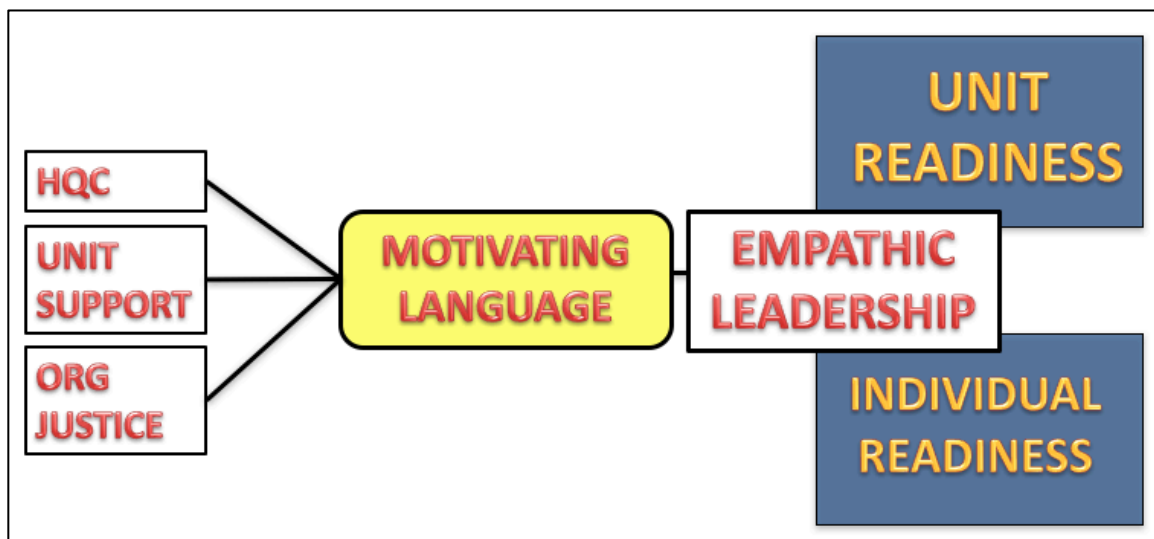


Figure 1. Theoretical Model

C. RESEARCH QUESTION

The primary research question is: Does an increase in Motivating Language (ML) decrease aircraft readiness shortages? Secondly, does an increase in ML with the mediation of empathic leadership improve the core competencies of subordinates? Third, does an increase in ML and the mediation of empathic leadership decrease the quantity of not-carried (NC) non-mission capable supply (NMCS) off-station documents within the Marine Air Group? Last, does an increase in ML and the mediation of empathic leadership decrease the amount of cannibalizations for not-in-stock (NIS) NMCS documents?

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II. LITERATURE REVIEW

A. DEFINING AVIATION READINESS

Aviation readiness for the Marine Corps is defined as core competent units “at the right time and at the optimal cost” (DON, 2016, p. 17; DON, n.d.b). Core competencies are identified as personnel qualifications that enable the mission readiness of a unit. Individual Training Standards System (ITSS) is one of the many avenues for reporting core-competencies for Marine aviation logisticians (DON, 2002; Germershuasen, 2012).

The right resource, at the right place, at the right time identifies service level (Altay & Litteral, 2011, p. 292). Service level is quantified by using Not-in-Stock (NIS) and Not-Carried (NC) data in Aviation Maintenance and Supply Readiness Reports (AMSRR). NIS cannibalizations can be identified by using AMSRR with cannibalization reports from the Squadron. NIS are items that are not on the shelf when the demand occurs while NC is an item that is not in the inventory (DON, 2014a). A cannibalization is when a part is removed from one aircraft for use on another. A NIS cannibalization is an inventory stock-out that caused a Squadron maintenance action. The prevention of NIS cannibalizations is the approach that supports service level metrics that are more relevant to what the customer (Squadron) wants (Altay & Litteral, 2011, p. 292; DON, 2012a).

The Commander, Naval Air Forces (CNAF) Instruction for the Naval Aviation Maintenance Publication and Aircraft Material Condition Readiness (AMCR) instruction provides the policies for reporting aircraft readiness (DON, 2012a; USMC, 2012b). Ready-based-aircraft (RBA) is a status for an aircraft that is in up-status or flyable with ready systems (i.e., basic mission, combat systems, expanded mobility, gun systems, guided munitions, rocket systems, targeting systems, etc.). Out-of-reporting (OOR) aircraft is a status for an aircraft that is out of reporting for depot level modification or repair (USMC, 2012b). NMCS status identifies an in-reporting aircraft that is down for a Non Mission Capable Supply (NMCS) requirement. Flight hour (FHR) is a term used to report aircraft flight hours flown for a specific aircraft on a specified date.

The AMSRR is a web-based reporting system that supports the implementation of AMCR policies. It provides the necessary data to Naval Aviation Enterprise (NAE) for measuring aircraft readiness and for identifying aircraft readiness critical concerns (DON, 2013, n.d.). The AMSRR is reported daily with populated data from Naval Aviation Logistics Command Management Information System (NALCOMIS) (USMC, 2012b; DON, 2012a).

The adherence to AMCR policies are directed to the MAG Commander. MAG Commanders are responsible for the adherence of readiness reports while the MALS Commanding Officer is responsible for Aviation Supply and Aviation Maintenance. The MALS Aviation Supply Officer is responsible for reconciling documents with the AMSRR while the MALS Aviation Maintenance Officer is responsible for monitoring aircraft readiness (USMC, 2012b).

B. HIGH-QUALITY CONNECTIONS

High-quality connections (HQC) measure relationships. HQC are brief positive interactions that identify cognitive, emotional, and behavioral mechanisms that strengthen relationships. Dutton et al. identify three critical structural features for measuring HQC (Cameron, Dutton, & Quinn, 2003; Dutton, Stephens, & Heaphy, 2003; Dutton & Baker, 2007; Dutton & Ragins, 2007; Cameron & Spreitzer, 2012). The first structural feature is carrying capacity, a structural feature of HQC that describes the emotional caring capacity of relationship connection and the expression of both positive and negative emotions. Next is tensility, describing the relationship capacity to bend and withstand strain during a myriad of circumstances. Third is connectivity; this feature describes the relationship quality of connectivity.

C. ORGANIZATIONAL JUSTICE (PROCEDURAL AND INTERACTIONAL)

Organizational Justice is the economic and social emotional consequence of decision making (Colquitt, 2001). The notion of fairness or justice is based on two decision outcomes interactional justice and procedural justice. Interactional justice

examines equality while procedural justice examines fair process criteria that reviews consistency and accuracy (Colquitt, 2001).

D. UNIT SUPPORT

Unit support is a widely used tool that examines feedback loops. Unit support is interpersonal risk during mission-related events that provide safe environments for feedback and decision making (Coram, 2002; Vogt et al., 2013; Moaz, Goldwin, Lewis, & Bloch, 2016).

E. MOTIVATING LANGUAGE (ML) THEORY

Motivating language (ML) is an interactive and open communication process that allows critical thinkers to provide feedback and discuss ideas towards specified goals. ML is a comprehensive theory for assessing communication between the leader and follower. Mayfield and Mayfield (2009) provided a theoretical framework for understanding leader communication and worker outcomes. ML provides the framework that incorporates direction-giving language, empathetic language, and meaning-making language.

1. Direct-Giving Language—Goal Attainment

Direction-giving language is the first ML component that provides goal guidance and clarity. Direction-giving language reduces worker anxiety by specifying requirements and decreasing task ambiguity (Mayfield, Mayfield, & Kopf, 1998; Mayfield & Mayfield, 2009). The use of genuine language by leadership enables goal-setting events through task clarification (House, 1971; Cottrell, 2002; Mayfield & Mayfield, 2016a), explication of desired performance (Robbins & Judge, 2012; Sullivan, 1988; Mayfield & Mayfield, 2016a), and constructive feedback (Cottrell, 2002; Miner, 2005; Sullivan, 1988; Mayfield & Mayfield, 2016b).

2. Empathetic Language—Stakeholder Appreciation

Empathetic language is the second component of ML that provides genuine acts of verbal interactions. Genuine expressions through verbal interactions focuses on the

employee's development and welfare rather than their performance abilities. Empathetic language is one of the strongest mechanisms that increases loyalty whereby increasing performance and job satisfaction (Mayfield & Mayfield, 2002; Simmons & Sharbrough, 2013). This speech category develops employee relationships (House, 1971; Yukl, 2013) and strong concern for interpersonal satisfaction at work (Miner, 2005; Yukl 2013).

3. Meaning-Making Language—Organizational Beliefs

The last component of ML is meaning-making language, which cultivates intrinsic motivating factors that develops unity of effort. Leaders use meaning-making language to affiliate employees with organizational goals. Employees are able to perform better when workplace cultural norms are understood. Cultural awareness of expectations has the ability to decrease anxiety behaviors in the workplace (Mayfield et al., 1998; Mayfield & Mayfield, 2009; 2016a). Meaning-making language can further assist employees in the interpretation of unique cultural values through stories, metaphors and informal symbolic conversations.

F. EMPATHIC LEADER

1. Leadership-Management Exchange Theory (LMX-7)

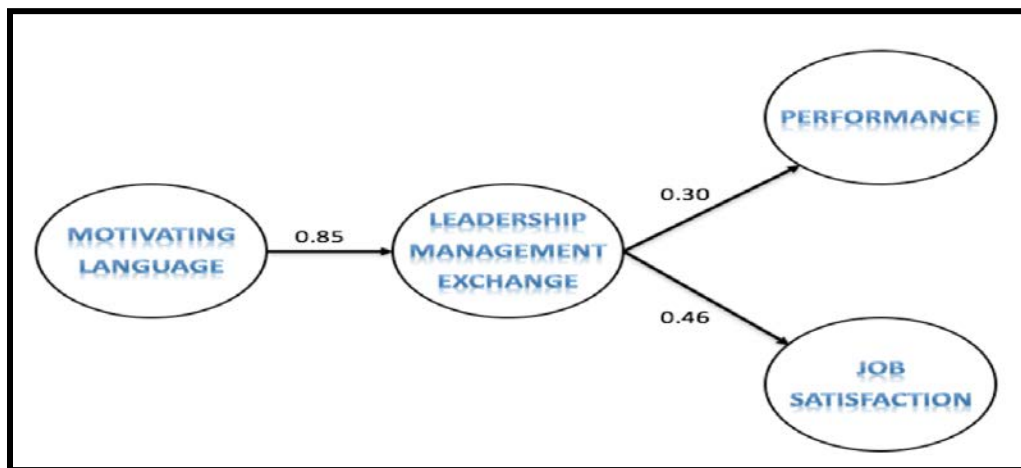
The development of leadership-management exchange or LMX-7 is characterized as professional relationships rather than personal relationships. Leadership-management exchange is based on three factors: (1) mutual respect for one another, (2) deep trust with each other, and (3) a series of interactions that grows into obligated partnerships (Graen, & Uhl-Bien, 1995; Ilies, Nahrgang & Morgeson, 2007).

Leadership-management exchange is a relationship-based approach that formulates two groups, the in-group and the out-group. The in-group are those who are within the circle of influence with leadership. These are the individuals that get more attention, greater responsibility, and more rewards for their performance and competence (Eden, 1992; Graen & Uhl-Bien, 1995; Mansour-Cole & Scott, 1998). The out-group are

the outsiders that receive fewer awards and less attention. They are those who are given formal policies and strict rules.

2. Leadership-Management Exchange (LMX-7) and Motivating Language

ML provides a framework for understanding leadership. Researchers Mayfield and Mayfield (2009) performed a study with Leadership-Management Exchange Theory (LMX) with ML. In their study (see Figure 2) they found that “leader-follower communication occurred within the context of leader-follower relationships.” The results of this study provided new insights into ML, which highlighted the importance of leadership with job satisfaction and unit performance outcomes.



This model provides a test on the role of leader-follower relationship in leader communication using LMX and motivating language.

Figure 2. Leader-Management Exchange and Motivating Language. Source: Mayfield & Mayfield (2009).

3. Empathic Leadership in the Workplace

Empathy or empathic emotions has an important role for creating a positive environment that increases job performance. Researchers Gentry, Weber and Sadri (2016) did a study on best business practices for job performance and cross-cultural integration. Gentry, Weber and Sadri (2016) research determined that “empathic emotion

plays an important role in creating a paternalistic climate of support and protection to promote successful job performance in these high power-distance cultures.” They further concluded that 1) Empathy can be learned, 2) Leaders may need time, training and coaching to develop the capability to demonstrate empathy and active listening skills, 3) Managers should put themselves in other person’s place in order to encourage genuine perspective taking, 4) Support managers should go beyond the stand-issue value statement and allow time for compassionate reflection and response, and last 5) The ability to be empathetic is important for global organizations or across cultural boundaries (disaggregated operations and deployments) that have very different perspectives and experiences (Alon & Higgins, 2005; Gentry et al., 2016). Their study determined that empathy is positively related to job performance and managers were given higher evaluations when they showed more empathy towards their subordinates.

Marine aviation logistics operates within a high-stress environment that requires empathic leadership. The Marine aviation logistics environment characterizes paternalism and power distance. Paternalism is where a leader will assume the role of a parent and feel the obligation to support and protect subordinates under their charge (Yan & Hunt, 2005). This environment is related to a term, power distance, “the degree to which members of an organization expect and agree that power should be stratified and concentrated at higher levels of an organization” (House & Javidan, 2004; Gentry et al., 2016).

G. CONTRIBUTIONS TO AREA OF STUDY

This thesis proposes complementary theories and designs that have the ability to strengthen capability and capacities, improve service levels and increase readiness within the Marine Air Group (MAG). Many theories have been applied to commercial markets however this study will be a first of its kind within Marine aviation logistics. There are Naval Postgraduate School studies on empathy, effective leadership and aircraft readiness but little to no qualitative studies have been done on service level, ML or empathic leadership. Ultimately, this research will add to knowledge base of unit readiness and individual readiness within aviation logistics.

This theoretical model, Figure 3, complements the study presented by Mayfield and Mayfield (2009) in Figure 2. Mayfield and Mayfield's (2009) study on ML and Leadership-Management Exchange presents new material on the effects of leadership on job satisfaction and unit performance. This study contributes to Mayfield and Mayfield's (2009) research by exploring the influence of HQC, unit support and organizational justice on motivating language (ML) and the mediation of empathic leadership on unit readiness and individual readiness.

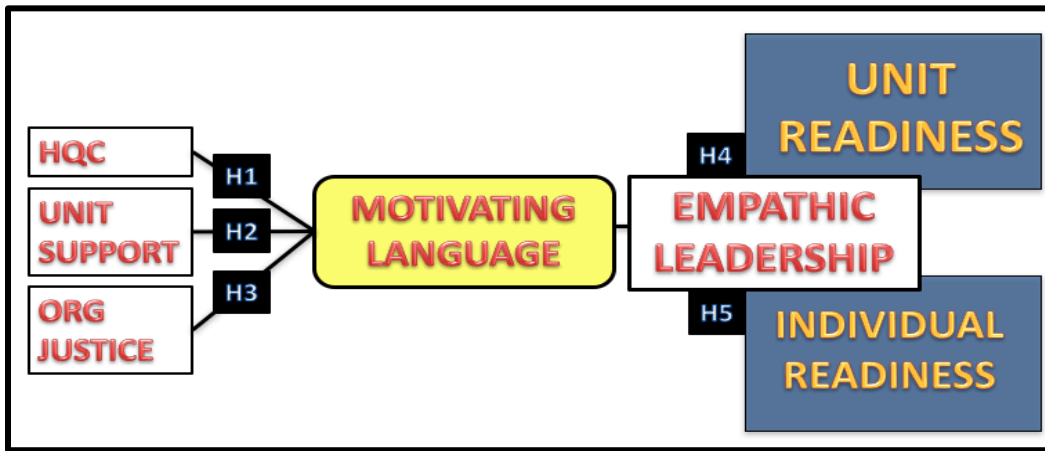


Figure 3. Theoretical Model with Hypotheses

- Hypothesis 1: Unit support positively affects motivating language.
- Hypothesis 2: Perceptions of organizational justice (procedural and interactional) positively affect motivating language.
- Hypothesis 3: High quality connections positively affect motivating language.
- Hypothesis 4: Empathic leadership mediates the relationship between motivating language and unit readiness.
- Hypothesis 5: Empathic leadership mediates the relationship between motivating language and individual readiness.

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III. RESEARCH DESIGN

This study will further research the applicability of HQC, organizational justice, unit support, ML and empathic leadership on aviation logistics. This research design will be first of its kind to be studied in the aviation logistics. This chapter will discuss command sponsorship, measures, constraints and limitations within the Marine Air Group (MAG).

A. MARINE AIR GROUP (MAG)

The MAG, Figure 4, is a rich environment for researching aviation readiness and service levels within aviation logistics. The MAG provides the foundation for this research because it provides the point of entry for all Marine aviation logistics requests. The MAG consists of six to eight flying Squadrons and one Marine Aviation Logistics Squadron (MALS). The MALS consists of nine maintenance work centers, which make up the MALS Intermediate Maintenance Activity (IMA) and the Aviation Supply Department (ASD).

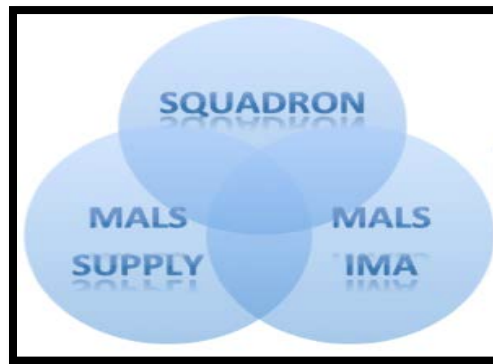


Figure 4. Marine Air Group

The Squadron is the point of entry for all parts requests within the aviation logistics system. The Squadron performs organizational level (O-level) maintenance that supports preventative maintenance, scheduled and unscheduled maintenance for the aircraft.

The MALS is the organic entity that supports the Squadron. MALS-IMA provides various organic intermediate repair capabilities such as engine overhaul, avionic repair, and airframe repair, while the MALS-ASD provides supply support.

B. COMMAND SPONSORSHIP

Recommend a 14-month lead-time for survey approval. A Wing General Officer (O-7) Command sponsorship are requirements for Naval Postgraduate School and Marine Corp Combat Development Center Institutional Review Board (DON, 2015a).

C. MEASURES

A paper-based survey is the ideal method for incorporating this study. Online surveys require computer resources that are used for daily administrative operations. The personal delivery of paper-based surveys also provides immediate feedback and confidentiality.

The paper-based survey will qualitatively research HQC, unit support, organizational justice, ML, and empathic leadership. HQC views strength of relationships as a foundational trait in an organization. HQC aims to strengthen safe social and relational environments. The HQC scale includes 20 items (questions) assessing feedback responsiveness (carrying capacity); problem-solving mechanisms during conflict (tensility); active listening skills (connectivity); professionalism (positive regard); and resilience (mutuality) (Cameron, Dutton, & Quinn, 2003). Responses are obtained on a five-point scale ranging from 1 = strongly disagree to 5 = strongly agree.

Unit support looks to provide tools to manage risk-taking in high stress and complex environments. Unit support scale includes 12 items assessing the subordinate's ability to make risk decisions and their ability to withstand external pressures (Vogt et al., 2013; Moaz et. al, 2016). Responses are obtained on a five-point scale ranging from 1 = not at all to 5 = extremely.

Organizational justice aims to build on the perceptions of formal and informal procedures. The combination of procedural and interactional justice assesses fairness and

the overall procedural justice of subordinates (Colquitt, 2001). Responses are obtained on a five-point scale ranging from 1 = to a small extent to 5 = to a large extent.

Procedural scale aims to strengthen and add to the knowledge base of fairness that enhance subordinate-leader interactions and relationships. Procedural scale includes seven items (questions) assessing job satisfaction, distributive justice, and organizational citizenship of courtesy, sportsmanship, and conscientiousness (Colquitt, 2001).

Interactional justice also aims to strengthen the fairness and perceptions of organization's formal procedures (Colquitt, 2001). This scale includes three items (questions) assessing the positive correlation of organizational citizenship (selflessness or brotherhood) with the negative correlation with retaliatory behaviors (Colquitt, 2001).

ML aims to re-energize or strengthen direction-giving language, empathetic language and mean-making language (Mayfield et al., 1998). ML scale includes 24 items with a five-point scale ranging from 1 = very little to 5 = a whole lot.

Empathic leadership has the ability to mediate unit and individual readiness by building on leader's emotional intelligence. Empathic leadership or the emotional-social intelligence (ESI) Bar-On scale provides 15 items that assesses empathic leadership (Baron, 2004; University of Texas Medical Branch, 2006). Responses are obtained on a five-point scale ranging from 1 = not at all to 5 = extremely.

Unit readiness and individual readiness are the overall measurements and outcomes of this study. Unit readiness is service levels that includes three items, NIS, NC, and NIS cannibalizations. NIS and NC data information are elements within NALCOMIS and the AMSRR. NIS cannibalizations are measures that identify significant shortages within the Marine aviation logistics system.

Positive and negative AMSRR correlations have the ability to quantify parts shortages with RBA aircraft. A suggested template for analyzing aircraft readiness variability is displayed in Figure 5. The raw summary data is retrieved from the AMSRR. Five sections are retrieved from the AMSRR 1) Ready-Based-Aircraft (RBA), 2) Out-of-Reporting (OOR) Aircraft, 3) Flight Hours, 4) Non-Mission Capable (down) for Supply

(NMCS) aircraft, and 5) NMCS documents. Excel's scattered diagram provides a picture of overall trends and patterns of shortages that can affect readiness levels.

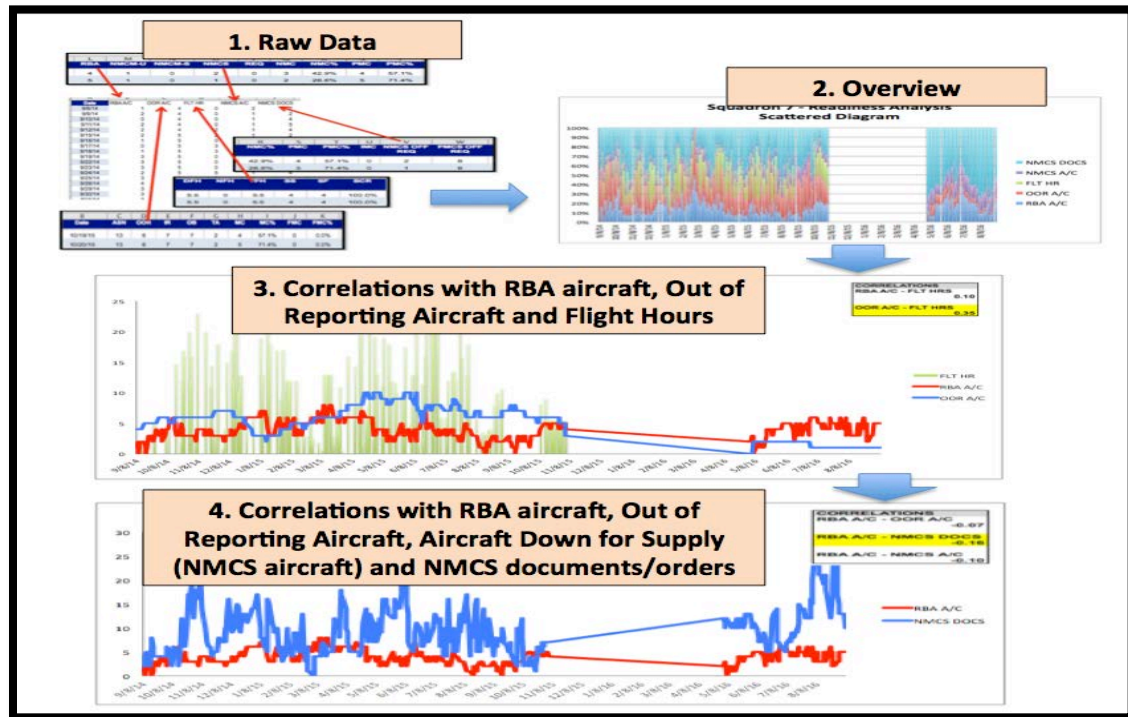


Figure 5. Aircraft Readiness Suggested Template for Analyzing Readiness Shortages

Individual readiness is the second scale for readiness. Individual readiness or ITSS are data elements for core-competencies (DON, 2002).

Last, demographics provide the necessary controls for this research. This study will use education, unit description, work experiences (deployment and training exercises), time-in-service, time on station, and work related skills (certifications and qualifications) to identify those controls.

D. CONSTRAINTS AND LIMITATIONS

MAG aviation operations are regularly tasked for worldwide contingencies, those who conduct this research should plan approximately 14 months to complete this study. As mentioned before, MAG personnel are more likely to complete a paper-based survey

than an online survey due to limited computer access by junior enlisted Marines. Wing General Command sponsorship and MAG leadership “buy-in” are also vital for this study. Survey distribution should be avoided between September and January to avoid delays caused by end of the year closeouts, rotation of personnel and deployment operation schedules.

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IV. DISCUSSION AND CONCLUSION

The ability to forecast demands for unknown environments requires motivating language and empathic leadership, at the right time and at the right place. This chapter will discuss an aviation logistics deployment scenario, address practical implications and provide a conclusion that supports the implementation of ML and empathic leadership.

A. SCENARIO OF MARINE AVIATION LOGISTICS

A hypothesized scenario for aviation logistics takes place onboard a ship during a Marine Expeditionary Unit (MEU) overseas deployment. While onboard a ship, the Squadron is in need of an Aviation Depot Level Repairable (DEG-706) that is both scarce (force-wide degrader) and time sensitive. The Squadron is participating in an upcoming operation and DEG-706 will be vital to the readiness of the Squadron necessary for this mission. There is an opportunity for replenishment in seven days. The minimal shipping lead time for an overseas (OCONUS) requirement is nine days. Lead time delays are caused by transportation, overseas administrative processing and ship-to-shore coordination (DOT, 2016).

Port visits are ideal for bulk material. It allows the ship and operational planners to load bulk materials in a timely and efficient manner (see Figure 6). Ship-to-shore movements require a myriad of coordinated efforts between ship representatives and ashore activities.



Figure 6. Aviation Logistics: Ship-to-Shore Movements and Ship Port Visits.
Adapted from Biller (2013), “Marines Hoist” (2012), Bauer (2004),
Wainwright (2014).

The Squadron is familiar with the difficulties involved with acquiring DEG-706. They predict DEG-706 will not make the timeline for the port visit. The ship has an authorized allowance for two DEG-706's however, due to logistical delays, DEG-706 is not in stock (NIS). Hence, the Squadron decides to cannibalize DEG-706 from another aircraft.

After several hours of attempting to connect to the internet, the ship expediter finally enters DEG-706 into the supply system. The delays were caused by slow internet connectivity and *river-city*. *River-city* are episodes of information and communication technology (ICT) shut-downs or “black-outs” (Stewart, 2012).

The request for DEG-706 are further delayed for administrative approvals. After passing DEG-706 to the supply system, the ship expediter receives an email notifying him of additional administrative approvals. He immediately sends an email to DEG-706 authorities within the aviation logistics chain. While, he awaits supply administrative approval, the Squadron informs the expediter that DEG-706 is also delayed for maintenance engineering approval.

At this time, it is 10 hours later, with no word for DEG-706 asset availability. Leaders from the MEU and the ship are now all involved. The concern is for the

timelines and the amount of work involved with the cannibalization of DEG-706. The cannibalization of DEG-706 will take four to seven days with a functional check flight. The port visit is in seven days; however, the aircraft is not authorized fly while in port. After a few hours, supply is notified by DEG-706 aviation logistics authorities that there are no readily available assets. Moments later, the Squadron notifies Supply that DEG-706 is no longer required, they were able to troubleshoot the system and fix the discrepancy without cannibalizing the component.

B. PRIVATE SECTOR CASES

Many of the improvements within aviation logistics are the results of information technology and logistical advancements from the commercial systems. The aviation logistics system demonstrated significant improvement in capabilities but not solely within the organic capabilities of the Department of Defense's aviation logistics systems. AIRSpeed (DON, 2012a), continuous process of improvement (DON, 2014a, p. 2) and *Just-in-time* (Ohno, 1988; USMC, 2016) initiatives mirror strategies of lean six-sigma (George, Rowlands, Price, & Maxey, 2005) and Toyota Production system (Ohno, 1988). Walmart's logistics chain is also famous for cross docking where trucks are unloaded and immediately loaded onto another vehicle. Disney's *fast-pass* initiatives create behaviors among customers to alleviate demand irregularities by allowing customers to schedule activities instead of waiting in lines. McDonalds is another example that used space and time to improve customer service. They did this by lengthening and spacing apart drive-thru services for time-phased deliveries in order to give the perception of movement while giving employees the buffer time to prepare the meals (i.e., ordering, payment and pick-up locations).

Fast-pass initiatives allow service providers the flexibility to handle abnormal activities while providing the capability to forecast shortages in complex environments. Southwest is an example that incorporates *fast-pass* initiatives within the aviation industries. Southwest uses single type-model-series aircraft to support their operation but they also use *fast-pass* initiatives with customers to support time-phased landings and flight departures.

Fast-pass initiatives also focuses on the customers. Southwest uses information technology check-in stations to alleviate the burden and fluctuation of demand for Southwest's agents. During fluctuating periods of high demand, Southwest alleviates the wait and burden on the customers by providing several options that align customer goals with Southwest's ultimate goal of departing on time. But all of this preparation starts at 12:00 a.m. before the first flight. At 12:00 a.m. customers are provided the opportunity to check in early on Southwest's website. The website provides all the necessary requirements to check-in. Automated technology at airport terminals provides additional *fast-pass* check-in opportunities.

Fast-pass has the ability alleviate uncertain and unknown demands that can cause *bull-whip* effect (Disney, Farasyn, Lambrecht, Towill, & Van De Velde, 2005). *Bull-whip* effect is the cause of negative behaviors within the logistics system that lead to stock-pilling and costly inefficiencies within supply chains (Padmanabhan & Whang, 1997; Lee, So, & Tang, 2000; Disney et al., 2005; GAO, 2016).

Fast-pass initiatives allow for steady-demands that compliment *Just-in-Time* (JIT) initiatives. JIT is "the right service, at the right time and at the right location" (Ohno, 1988). Corporations normally collapse in high volume networks but Southwest has been able to sustain irregular demand patterns with *fast-pass* initiatives.

Fast-pass in Marine aviation logistics is shared knowledge and points of contacts. Administrative authorities (NAE, Commander Naval Air Forces Atlantic/Pacific, Defense Logistics Agency, NAVSUP, etc.) or stakeholders (Mayfield and Mayfield, 2009) are subject matter experts (DON, 2012a) in their field that interpret policy and have direct access to key points of contacts. Shared knowledge and points of contacts can be gained through information and communication technologies (Cheney, Christiansen, Zorn, & Grnesh, 2011). However, the interpretation of policy and network relationships are crucial when high risk is involved. During high-risk activities and operational planning, face-to-face conversations with administrative authorities are crucial to timely consensus and decision making within complex environments (Mintzberg, 1979, 1983, 1993; Kates & Galbraith, 2007; Arvey, 2009; McEuen & Duffy, 2010; Warren, 2011; Braun, Bark, Kirchner, & van Dick, 2015).

Face-to-face conversations provide a positive environment that promotes feedback (Feist, G. J., & Rosenberg, E. L., 2010) and “conversations for action” (Flores, 2012, p. 1; Denning & Lyons, 2016a; 2016b). Denning and Lyons (2016a) describe leadership as “the management of conversations.” Before 2011, the DOD allowed stakeholders and key personnel to travel to subordinate units. Stakeholders provided relevant training opportunities for feedback, critical thinking, and shared experiences that provided competitive advantages for attendees, especially for junior Enlisted Marines. However, in 2011, cost-cutting efforts caused the Department of Defense to scrutinize conferences and travel for all DOD personnel (DON, 2012b). This policy prevented misuse and abuse of government funds but also decreased the opportunity for junior Enlisted Marines to develop of high quality connections, motivating language, and empathic leadership with stakeholders.

The zero tolerance for failure and the negative cost of inadequacies in motivating language and empathic leadership has the likelihood of preventing feedback and developing a culture of silence among junior Enlisted Marines (Todd, 2014). The culture of silence is the “shame and guilt a warrior feels from having killed [caused others to be punished] another human being [Marine brother] or *survivor’s guilt* for failing to keep his comrade [leader/subordinate] from being killed [punished or reprimanded]” (Todd, 2014). Todd (2014, pp. 48–60) highlights activities that involve deep listening, genuine conversations and the development of long-term relationships that reduces the code of silence.

C. IMPLICATIONS FOR THE PROPOSED STUDY

The positive outcomes of this study would provide a framework and applicable tool that is readily available to enable innovative leaders and promote a unified command. The positive influence of unit support, perceptions of organizational justice and high quality connections has the ability to affect motivating language. Furthermore, empathic leadership has the ability to mediate the relationship between motivating language and readiness.

Positive HQC has the ability to increase productivity and enhance collaboration at various levels within the organization. At the organizational level, HQC provides enhanced cooperation, increased loyalty and efficiency in operations. For group levels, teams are more adaptive, creative and are more willing to participate in shared informational networks. At an individual level, HQC creates broader thinking, heightened learning, and increased resilience (Dutton, 2015).

The positive influence of HQC allows organizations to learn from failure and produce high-reliability atmospheres that creates open communication that encourages others to share valuable knowledge that will prevent failures in the future (Carmeli & Gittell, 2009). Overall stating, “the benefits of speaking up outweigh the cost for the speaker” (Edmondson & Detert, 2005, p. 3, 44).

The positive influence of unit support promotes a safe environment for feedback and discussion. Unit support allows for freedom of movement, freedom of thought and action and decision-making (Vogt et al., 2013; Moaz et al., 2016).

The positive influence of organizational justice produces “trust of manager, job satisfaction, and organizational citizenship” (Colquitt, 2001, p. 388). Overall, balancing distributed fairness between the in-group and out-group described in leadership-management exchange.

The key traits for entering in-group are staying focused on goals, taking initiative, and developing high quality connections with managers. Motivating Language (ML) has the ability to mediate communication deficiencies and subordinate feedback within commands and organizations. The results of the positive influence of ML has the ability to explain 18 percent of the variance in worker’s performance and 37 percent of variance in a worker’s job satisfaction (Mayfield et al., 1998). Additionally, the ML model has the ability to explain 86 percent of latent variables and manifest variables such as worker performance, job satisfaction and relationships with leaders.

Empathic leadership has the ability to mediate various aspects of human performance, promote self-actualization and subjective well-being (Goleman, 1998). The empirical findings from the research of University of Texas (2006) demonstrated that

emotionally and socially intelligent behavior enhanced school, workplace, and clinical environments.

Perceived leadership effectiveness and leader communication satisfaction are the results from numerous studies that demonstrate significant and positive relationships between high leader ML and organizational outcomes; such as employee innovation, job performance, job satisfaction, and effective decision making (Mayfield & Mayfield, 2009).

Studies demonstrate better performance by subordinates within the in-group. In 2007, researchers conducted 50 studies involving 9,324 subjects:

[They] revealed a moderately strong, positive relationship between subordinates with in-group status and more helping or ‘citizenship’ behaviors at work (Nahrgan, & Morgeson, 2007). In another study, followers with in-group status with their leaders had higher performance ratings and reported greater satisfaction with the leader (Chen, Lamb, & Zhong, 2007). (Lunenburg, 2010, p. 2)

Overall, they concluded that leaders are more likely to invest their time and effort into those that perform well and demonstrate competence (Lunenburg, 2010).

Empathy is the “attribute-prime” of successful leaders (Wilson, 2015, p. 1). For three years, researcher Ernest Wilson with the University of Southern California, asked business leaders from around the world the critical attributes necessary to succeed in today’s digital and global economy. They identified five critical attributes, “adaptability, cultural competence (the capacity to think, act, and move across multiple borders), 360-degree thinking (holistic understanding, capable of recognizing patterns of problems and their solutions), intellectual curiosity, and, of course, empathy” (Wilson, 2015, p. 1). This “Third Space” the author describes is sharply different from the long dominated perspectives of business thinking, which are engineering and traditional MBA perspectives.

Empathic leadership and motivating language for leader-follower relationships and leader communication may become critical elements for the millennial generation. By 2020, the millennial generation will make up more than 50% of the workforce

(Meister & Willyerd, 2010; Brack, 2012; Mayfield & Mayfield, 2016a). The Millennial generation are those that were born between 1982 and 2003 (ages 13 to 34), characterized by their rational thinking, positive attitudes, and teamwork mentality (Strauss & Howe, 1991).

The ideas discussed in this study points to a vision that provides guidance and direction in an environment of complexity (Graeber, 1999; Slyman, Jacubec, Cox, & Rubel, 2009; Naegle & Boudreau, 2011; Palomino & Epp, 2012; World Economic Forum, 2015; Kang, 2016). The implementation of these ideas proposes a leader that is willing to champion innovative thought in aviation logistics (Diaz, 1998; Jones, 2009; Sanborn, 2014; Dana, 2016; Sherwood, 2016).

For these reasons, advocacy and strategic planning requires flag officer representation and direction within Marine aviation logistics. The Marine Corps and the Navy culture is organized around the rank structure. Customs and courtesies can prevent (O-6) Colonels from entering the flag mess. The flag officer status is a vital position that supports vision, direction, and doctrine. More importantly, flag officers align strategic policies and doctrines to the strategic goals. The Ground Combat Element (GCE), Logistics Combat Element and Air Combat Element within the MAGTF are all led by one to three star Generals. Furthermore, Marine Forces and Naval Air Forces Atlantic/Pacific are also led by three star Generals and Admirals. A Marine Aviation Logistics General is a strong candidate for Marine aviation's "*fast-pass*" or entry into the flag mess for the strategic conversations related to readiness.

D. CONCLUSION

ML and empathic leadership have the ability to improve unit readiness and individual readiness. Business leaders around the world are recognizing this idea and enthusiasm for empathy. Empathy is gaining popularity among business leaders because it enables those who possess it to see the world through the eyes of others.

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